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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/505,297	08/20/2004	David Eric Appleford	1064.23	3792
21176	7590	11/21/2006	EXAMINER	
SUMMA, ALLAN & ADDITON, P.A. 11610 NORTH COMMUNITY HOUSE ROAD SUITE 200 CHARLOTTE, NC 28277			DWIVEDI, VIKANSHA S	
			ART UNIT	PAPER NUMBER
			3746	

DATE MAILED: 11/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/505,297	Applicant(s) APPLEFORD ET AL.	
	Examiner Vikansha S. Dwivedi	Art Unit 3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/20/2004 thru 5/25/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 8/20/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

Applicant Information Disclosure Statement submitted on 8/20/2004 does not comply with 37CFR 1.97 and 1.98 the Japanese references listed therein has not been considered. Applicant has not provided translation for the foreign reference listed therein. An initialed and dated copy of Applicant's IDS form 1449, Paper No. is attached to the instant Office action.

Drawings

Figures 1, 2 and 3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: For example reference numerals 140 and 154 shown in Figure 3 are not discussed in the specification presented by the applicant. 140 and 154 are just examples of the reference numerals that are not described in the specification, applicant is advised to review the drawings and make sure there is proper description for the

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reference numerals shown in the drawings. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "12" has been used to designate both housing and compressor (Specification, Page 1, lines 15-16). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because drawings do not include illustrations which facilitate understanding of the invention, for example it will be helpful if 174 is labeled as drying means on the drawing. Applicant is suggested to review the drawings. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 12-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Canadian Pub-No. CA 2,312,085 to Dessibourg et al.

A gas seal system assembly, comprising: a housing 6; an electric motor 2 accommodated within a first portion, portion surrounding motor 2 as shown in the Figures, of the housing; rotating machinery 3 accommodated within a second portion, portion surrounding turbocompressor as shown in the figures, of the housing and driven by said electric motor 2; separation means, gas seal 19, in the housing between said

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first and second portions thereof for separating fluid acted upon by said rotating machinery 3 from said electric motor 2; gas introduction means 8 and 9 for introducing at least substantially dry motor protection gas into said first housing portion, portion surrounding motor 2; wherein said gas introduction means further comprises a restricted gas flow means, shown in Figure 2 near 2d and 7a, and for permitting a leakage of the motor protection gas from said first housing portion into said second housing portion; and a circulating apparatus figures 3 and 4 for diverting a portion of the fluid acted upon by said rotating machinery 3 to said first housing portion, said circulating apparatus including drying means 10 for reducing the moisture content of the acted upon gas diverted back to said first housing portion, said drying means having at least one outlet 9; wherein said gas introduction means includes external means 8 for supplying the at least substantially dry gas; wherein said means for supplying the at least substantially dry gas comprises a gas drying and supply unit 10 on a remote host facility linked to said first housing portion by an umbilical 8; wherein said drying means 10 separates the diverted portion of the acted upon gas into an at least substantially moisture-free first outlet flow 9 and said circulating apparatus includes first routing means for routing the first outlet flow 9 from a first one of said at least one outlet of said drying means to said first housing portion; wherein said second housing portion, portion surrounding 3, includes a compressor inlet for receiving gas at a first pressure and a compressor outlet for delivering gas at a second pressure higher than the first pressure, inlet and outlet for compressor 3 seen in figure 3 and 4, and said restricted gas flow means enables leakage of the motor protection gas into said second housing portion; including means

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for automatically maintaining the motor protection gas at a pressure above that of fluid in a part of said second housing portion adjacent said restricted gas flow means, 2d and 7a as in figure 2; wherein said rotating machinery is selected from the group consisting of compressors and centrifugal pumps, turbocompressor 3; wherein said gas flow means is adjacent said compressor inlet as seen in figure 1 the inlet for compressor 3 is adjacent to the to 2d and 7a.

Method claim 16 is rejected because the prior art apparatus as taught by Dessibourg and as discussed above, performs the present method steps as claimed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dessibourg.

Dessibourg discloses the claimed invention except for the secondary line for the drying means as claimed in claims 5-10. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide an extra second outlet flow that has a secondary outlet and inlet flow lines in order to provide a more efficient separation and cooling of the gas (page 14, paragraph 1) , since such a modification would amount to a mere duplication of parts. It has been held that mere duplication of

the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Canadian Pub-No. CA 2,312,085 to Dessibourg et al. in view of Du Pont 4,311,004. Dessibourg discloses the claimed invention substantially as explained above. Dessibourg does not disclose a valve as claimed in claim 11. Du Pont discloses several valves for example 86 as seen in figure 2. It would have been obvious to one of ordinary skill in the art at the time of the invention to place a valve in the flow path to allow little or no gas flow through line by selecting and/or adjusting the valve, col. 6 ll. 35-41. It should be noted that Dessibourg discloses various types of valves and non-return valves are well known in the art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vikansha S. Dwivedi whose telephone number is 571-272-7834. The examiner can normally be reached on M-F, 8-4.

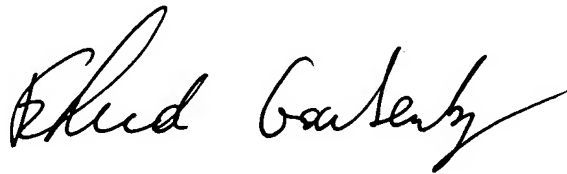
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ehud Gartenberg can be reached on 571-272-4828. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



VSD
November 12, 2006



**EHUD GARTENBERG
SUPERVISORY PATENT EXAMINER**